

AP Statistics Worksheet
Chapter 9 Practice

Name: _____

The modern Olympic Games, a modified revival of the ancient Greek Olympian Games, were inaugurated in 1896. Since then, the Games have been held nearly every four years at various sites around the world, and have become a major international athletic competition.

Below are the male gold medal winning distances.

1. Create a scatterplot of the data and justify the use of the scatterplot.
2. Describe the trends in the long jump performances, in context.
3. Predict the distance that will win the gold medal in the men's long jump in the 2012 Games in London.
 - a. Create an appropriate model and write the equation for that model. Explain your reasoning in using that model—make sure to include a graph(s).
 - b. Comment on how **accurate** you think your prediction will be.
4. How did you handle the “unusual” point of 1968? Explain how you treated that point and any type of impact that point might have on your prediction or your analysis of the historical trends in the men's long jump.
5. What would be your prediction for the distance that will win the gold medal in men's long jump in the 2032 Olympics? How much confidence do you have in that prediction and why?

Year	Distance (inches)
1896	249.75
1900	282.875
1904	289
1908	294.5
1912	299.25
1920	281.5
1924	293.128
1928	304.75
1932	300.75
1936	317.3125
1948	308
1952	298
1956	308.25
1960	319.75
1964	317.75
1968	350.5
1972	324.5
1976	328.5
1980	336.25
1984	336.25
1988	343.25
1992	342.5
1996	334.65
2000	336.6
2004	338.2
2008	328.3